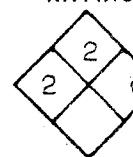




SHELL OIL COMPANY
SHELL CHEMICAL COMPANY
SHELL DEVELOPMENT COMPANY
SHELL PIPE LINE CORPORATION

MSDS 5200-1

HAZARD
RATING



NFPA

MATERIAL SAFETY DATA SHEET

Information on this form is furnished solely for the purpose of compliance with the Occupational Safety and Health Act of 1970 and shall not be used for any other purpose. Use or dissemination of all or any part of this information for any other purpose may result in a violation of law or constitute grounds for legal action.

SECTION I			
MANUFACTURER'S NAME Shell Chemical Company			EMERGENCY TELEPHONE NO. 713-473-9461
ADDRESS (Number, Street, City, State, and ZIP Code) One Shell Plaza, P.O. Box 2463, Houston, Texas 77001			
CHEMICAL NAME AND SYNONYMS Ethylene Glycol Monobutyl Ether; Ethanol, 2-butoxy		TRADE NAME Butyl OXITOL(R) Glycol Ether	
CHEMICAL FAMILY Glycol Ether		FORMULA C ₆ H ₁₄ O ₂	

SECTION II HAZARDOUS INGREDIENTS*						
COMPOSITION	%	SPECIES	LD ₅₀		LC ₅₀	
			ORAL	DERMAL	CONCENTRATION	HOURS
Ethylene Glycol Monobutyl Ether	100	Rat	1.48 to 2.50 g/kg			
		Rabbit		0.45 to 0.56 g/kg		
		Mouse	1.2 g/kg		700 ppm	7

SECTION III PHYSICAL DATA			
BOILING POINT (°F)	340	SPECIFIC GRAVITY (H ₂ O=1)	0.90
VAPOR PRESSURE (mmHg) @ 68°F	0.6	PERCENT VOLATILE BY VOLUME (%)	0
VAPOR DENSITY (AIR=1)	4.1	EVAPORATION RATE (n-BuAc = 1)	0.07
SOLUBILITY IN WATER	100%		
APPEARANCE AND ODOR Clear, colorless liquid; mild odor.			

SECTION IV FIRE AND EXPLOSION HAZARD DATA							
FLASH POINT (Method used) 138°F	TCC	FLAMMABLE LIMITS	<table border="1"> <tr> <th>Lel</th> <th>Uel</th> </tr> <tr> <td>-</td> <td>-</td> </tr> </table>	Lel	Uel	-	-
Lel	Uel						
-	-						
EXTINGUISHING MEDIA Foam, CO ₂ , dry chemicals, water fog or steam.							
SPECIAL FIRE FIGHTING PROCEDURES Exclude air. Do not use stream of water. Do not enter confined fire space without proper protective equipment including NIOSH approved self contained breathing apparatus							
UNUSUAL FIRE AND EXPLOSION HAZARDS None							

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	
OSHA TWA = 50 PPM (skin)	
EFFECTS OF OVEREXPOSURE	
Moderate to severe eye irritant; slightly irritating to skin. Vapor can cause damage to liver, kidneys, and blood. The same effects can be produced by absorption of the liquid through the skin.	
EMERGENCY AND FIRST AID PROCEDURES	
Skin-remove liquid with soap and water. Eyes-flush with water at least 15 minutes.	
Ingestion-give large amounts of water or milk to drink, induce vomiting by touching back of throat with finger. Obtain medical attention immediately. Inhalation-remove victim to fresh air. Use artificial respiration if required. Obtain medical attention.	

SECTION VI REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	Heat on open flame.
INCOMPATIBILITY (Materials to avoid) Strong oxidizing agents. Aluminum.			
HAZARDOUS DECOMPOSITION PRODUCTS			
Dissolves aluminum from surfaces which are scratched or heated. Gives off hydrogen.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	
Immediately eliminate any open flame. Provide adequate ventilation. Protect against storm drain or water supply contamination. Notify authorities if any exposure to the general public or environment is threatened.	
WASTE DISPOSAL METHOD	
Small spills-collect on absorbent materials. Sweep up and drum off for disposal.	
Large spills-pump into drums or vacuum truck for ultimate disposal. Dispose of waste by controlled burning.	

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)		
NIOSH-approved organic cartridge respirator, canister mask or air pack as required.		
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER
	Recommended	
	Recommended	
PROTECTIVE GLOVES		EYE PROTECTION
As required to prevent skin contact		Chemical safety goggles to guard against splashing.
OTHER PROTECTIVE EQUIPMENT		
As required to prevent skin contact		

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	
Handle as combustible liquid. Avoid all open flame. Avoid splash-filling. Store in cool, well-ventilated locations. Avoid use of aluminum equipment.	
OTHER PRECAUTIONS	
ATTENTION!! PRODUCT CONTAINER HAZARDOUS WHEN EMPTIED. Since emptied container retains product residues (vapor or liquid), all labeled hazard precautions must be observed.	

Product Safety and Compliance

Oil and Chemical Products

Shell Oil Company

April 1978

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